Service Date: January 26, 2004

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER Of Establishing	)	UTILITY DIVISION
Cost-Based Wholesale Prices for the Remainder	)	DOCKET NO. D2002.7.87
of Qwest's Network Elements	)	ORDER NO. 6435b

FINAL ORDER

I. Background

1. The purpose of the filing is to resolve unbundled network element (UNE) and interconnection service issues that were not addressed in Montana Public Service Commission ("PSC") Docket No. D2000.6.89 or that may have emerged as costing issues in Qwest's 271 docket.[1] On July 8, 2002 Qwest filed with the Commission cost-based wholesale prices for the network elements for which costs and prices were not developed in D2000.6.89. Qwest's filing asserts to provide cost models and studies to support its pricing proposals and to address several questions from the 271 proceeding.

2. The Commission's Public Interest Report (July 8, 2002) in the 271 docket lists as outstanding the following cost issues: (1) around one-hundred new SGAT (Statement of Generally Available Terms and Conditions) rates; (2) an emerging service issue involving line sharing and Qwest's tying of data and voice services; (3) subloop unbundling issues; (4) the inclusion of host-remote transport costs in tandem transmission charges for traffic traversing umbilicals that connect host and remote switches; (5) the issue of commingling (traffic) and ratcheting downward of rates on trunk groups; (6) dark fiber and packet switching; (7) double recovery of trouble isolation charges; (8) UDIT

[1] Pursuant to 47 U.S.C. § 271, Qwest filed for approval to enter the InterLATA Interstate Market. That proceeding was assigned PSC D2000.5.70 ("271 Proceeding").

versus EUDIT costing and pricing issue; and (9) Qwest's transposing of an OSS charge for line sharing.

3. The Commission released its Procedural Order on August 7, 2002 establishing a March 25, 2003 date to commence the hearing in this docket.

4. In a September 11, 2002 Notice of Commission Action the Commission denied Qwest's motion for a protective order and directed Qwest to submit responses to discovery propounded by the Montana Consumer Counsel ("MCC").

5. In an October 28, 2002 Notice of Commission Action the Commission included the following additional issues in this docket:

1. Commingling of InterLATA and Local Traffic on the same Trunk Groups; and
2. The rate benchmarking process that is unique to this docket.

Qwest filed its additional issue testimony on November 19, 2002. No party besides Qwest filed testimony in either the main or the additional issue phase of this docket.

6. Interveners in this proceeding filed on April 11, 2003 their stipulated settlement of this case. The parties to the settlement include Qwest Corporation, Montana Consumer Counsel (MCC), Blackfoot Communications (BFT), 3 Rivers Telephone Cooperative and One Eighty Communications of Montana. The latter four interveners either support or have no objection to the Application by Qwest. The parties asked that the Commission issue a final order in this docket which approves the Application based upon the following agreed upon record: (a) the pre-filed testimony of Qwest's witnesses in the proceeding; and (b) Qwest responses to intervenor and Commission staff discovery. Each party to the stipulation agreed to waive the following rights provided them under Montana Administrative Procedures Act, Sections 2-4-101 et seq of the Montana Code Annotated: (i) the right to a hearing as provided in Section 2-4-612 Mont. Code Ann., including the right to present evidence and argument at the hearing, or to conduct cross examination of the Qwest witnesses; and, (ii) the right to submit post hearing briefs. The parties to the stipulation requested that the Commission conduct a public hearing.

7. On April 30, 2003 the Commission noticed a May 20, 2003 public hearing. The hearing was held on the noticed date in the Commission's Bollinger Hearing Room.

8. This order is organized as follows: Initial Filing Testimony; and Additional Issues Testimony.

II. Findings of Fact & Commission Findings

A. Initial Filing Testimony

9. Cheryl Gillespie's testimony introduces Qwest's witnesses, summarizes wholesale prices, and comments on a policy concern. As for history, she notes that this docket is Qwest's third wholesale pricing proceeding. For most wholesale unbundled network elements the Commission established permanent prices in wholesale cost docket D2000.6.89.

10. In this docket, Qwest proposes prices for elements not addressed in the prior wholesale cost docket.[2] Qwest asks that the Total Element Long Run Incremental Cost (TELRIC) prices attached to her testimony be approved. The prices include those contained in D2000.6.80, and also include a proposed non-recurring price reduction for the installation of DS1 and DS3 services. Gillespie's testimony on line sharing is reviewed later under that topic.

1. Cost Models

a. Testimony and Background

11. Teresa Million's direct testimony addresses several topics that involve costing. She sponsors and supports cost studies for each of the remaining recurring and nonrecurring cost issues not addressed in D2000.6.89. The cost studies are consistent with and involve TELRIC principles addressed in D2000.6.89.[3] Through investment models, Qwest calculates the forward-looking long-run cost of replacing network facilities. These costs must be realistic estimates of costs that Qwest is likely to incur.

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[2] Qwest proposes wholesale price reductions as described in Teresa Million's testimony.

[3] Qwest enumerates TELRIC principles for wholesale pricing. The FCC's TELRIC costing method bases pricing on forward-looking long-run costs as well as a reasonable portion of common costs.

Qwest used each of the present proceeding's models in D2000.6.89. Million provides model descriptions and model-usage instructions (Ex. TKM-2). Qwest uses a 10.94 percent cost of money.[4] In addition, Qwest uses the same depreciation lives from the prior proceeding.

b. Commission Finding: Cost Models

12. The parties signing the stipulation approve of Qwest's pre-filed testimony which includes its costing (TELRIC) models. For purposes of this docket Qwest's cost studies may be used to price wholesale services contained in pre-filed testimony.

2. Host-Remote Transport Costs

a. Testimony and Background

13. After a review of the Commission's 271 findings on this issue Qwest's testimony is reviewed. As background, the Commission's 271 Final Report on Reciprocal Compensation (March 6, 2002) contains the following findings:

> *The issue before the Commission is whether to approve or revise Qwest's rates that include host-remote transport costs in tandem transmission charges and collect such charges for traffic that traverses the umbilicals connecting a host and remotes. The Commission's Final Order on Stipulation in the matter of Qwest's wholesale pricing docket approved such rates (D2000.6.89, Order No. 6260b). AT&T opposes the charge and Qwest seeks affirmation of the pricing in the Stipulation, including assessing the tandem transmission charge for traffic between a host and remotes.*
>
> *The Commission agrees with AT&T that umbilicals are like other facilities in that remotes serve a loop aggregation function. The Commission agrees with Antonuk that facilities connecting a host and remotes have characteristics of both trunks and loops. The Commission disagrees with Qwest's argument that the connection between a host and remotes are not part of the loop.*
>
> *In addressing the cost aspects of this issue Antonuk reasons that if Qwest does not recover the cost of umbilicals in loops, it is proper to include them in transport. This reasoning serves only to avoid a double collection. With this reasoning if one means of recovery is used, another means should not also be used. Antonuk's reasoning does not address which source of cost recovery is analytically correct. Antonuk correctly observes, however, that umbilicals have characteristics of both loops and trunks.*
>
> *Umbilicals serve differing purposes. Umbilicals may serve to interconnect communities for toll calling or to connect communities for unlimited local calling at a flat rate, so-called local service, combined with access for toll calls.*

[4] This 10.94% cost of money reflects the return in Qwest's latest contested case: PSC Docket No. D86.11.64. If updated, Qwest would support an 11.2% cost of money. (DR PSC -008)

"Umbilical" emerged as a term of art in this 271 proceeding. Qwest confirms to not use the term in its Montana wholesale cost docket and adds that an umbilical is a host-remote connection (see Qwest response to PSC 13-257 in D2000.6.89). Qwest's year 2000 Annual Report lists the number and types of "host-remotes" -- umbilicals. The 2000 Annual Report lists no less than eight (8) remotes linked to the Helena host (Qwest correspondence to the Commission dated March 6, 2001). Some of these host-remote facilities link communities between which calls are <u>local</u> service calls (e.g., Helena to Wolf Creek, Helena to Helena North). Other host-remotes link communities between which calls are <u>toll</u> calls (e.g., Helena to Anaconda). Thus, umbilicals -- host-remote -- include facilities to expand local service calling areas and are used for toll calls. Since umbilicals may be used for different purposes they have, as Antonuk notes, characteristics of both loops and trunks: collectively, they are neither fish nor fowl. In turn, costing and pricing is complicated.

Although the discussion here raises wholesale costing and pricing the Commission finds relevant how Qwest prices its retail service involving hosts and remotes. With retail costs and prices Qwest may recover the cost of umbilicals in the retail counterpart of wholesale loop UNE rates. Take Helena, Montana for example. Up until the time that Qwest added EAS (extended area service) customers paid long distance rates to make toll calls between Helena and the towns of Townsend, Boulder, or Wolf Creek: Helena Main is the host and the towns are served by remotes. Since EAS was implemented, customers in Helena, Boulder, Townsend and Wolf Creek pay an EAS increment (about $2.44) along with their monthly local exchange service rate. For these charges Qwest permits these customers to make unlimited local service calls. Thus, in the case of retail service umbilical costs are in local service rates.

Remotes served off of host switches that result in unlimited local calling for a flat rate did not emerge with EAS. For example, the Helena Main (host) serves Helena North (a remote). This relation predates EAS between Helena and Boulder et. al. The basic exchange service rates Qwest charges residential and business customers served by Helena Main and Helena North allows them unlimited local calling over the umbilical facilities connecting the host and remote.

Although it disputes the relevance of retail pricing, Qwest recovers some, perhaps not all, umbilical costs in local exchange service rates. In turn, and because Qwest uses retail local exchange rates to de-average its wholesale loop UNE rates, the embedded cost of umbilicals, in Qwest's retail rates, ends up in the wholesale loop UNE rates the Commission approved in its Final Order On Stipulation. There is a connection between retail and wholesale rates and Qwest's wholesale loop UNE rates include umbilical costs. In turn, the approved Stipulated rates include umbilical costs in both loop UNE rates and in tandem transmission rates that Qwest would charge for traffic that traverses host-remote links. Therefore, if the Commission continues to approve of Qwest's proposal to collect umbilical costs in both loop UNEs and in charges for host-remote transport, the problem Antonuk raised indeed exists. This problem must be remedied.

> *The Commission's choices include (1) to hold as inviolable the Final Order On Stipulation and continue to approve of rates in the Final Order On Stipulation or (2) to take a different tack. The Commission noted in its Final Order on Stipulation that its approval of the stipulated rates was conditional. The Commission now chooses to exercise that option – condition-- and remedy the problem associated with this issue. Qwest may not assess the tandem transmission charges for traffic transiting its host-remote umbilicals that are in Exhibit A to the SGAT. Qwest may file in its new wholesale cost docket evidence to correct its rates as it deems necessary. As the Commission understands that the finalization of wholesale pricing is not essential to 271 entry approval remedying this pricing concern should not, other things being equal, retard Qwest's effort to enter the interLATA market. Qwest must make changes to its SGAT in compliance with this decision.* (271 Final Report on Reciprocal Compensation, March 6, 2002, footnotes excluded).

14. In this docket, Teresa Million testifies that the Commission previously found that Qwest should not assess tandem transmission charges for traffic that traverses umbilicals connecting host and remote switches.[5] Although Million argues that the cost for such traffic pertains to Qwest's transport model, and that the company does not recover these costs through loop charges, she asserts that the issue should not be a concern as Qwest's Montana SGAT conforms to Commission direction. She concludes that "Qwest will not assess tandem transmission charges between the host switch and the remote switch." She testifies, however, that in developing the costs for tandem transmission, Qwest includes a weighting for certain interoffice transport costs in instances when the host switch functions as a tandem in the routing of traffic to the remote switch where the call terminates.[6] She explains that Qwest includes such costs because Qwest's facilities function as interoffice transport and not as loop facilities.

b. Commission Finding: Host-Remote Transport Costs

15. The Commission finds that the testimony filed by Qwest's witness Million is not thoroughly responsive to the Commission's concern. To re-state, the concern is:

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[5] A remote switch is connected to a host switch by an "umbilical." Although most or all of the control equipment resides in the host switch, a remote switch is a separate wire center and has its own caps. (DR PSC -007)

[6] Although it did not explain how it weights such costs, Qwest asserts that this issue is moot since Qwest's Montana SGAT comports with the Commission's determination in the 271 proceeding. (DR PSC -012)

Whether to approve or revise Qwest's rates that include host-remote transport costs in tandem transmission charges and collect such charges for traffic that traverses the umbilicals connecting a host and remotes.

16. In its 271 Final Report on Reciprocal Compensation the Commission states its agreement with both AT&T and Antonuk that umbilicals serve loop aggregation functions – that they have characteristics of loops and trunks. The Commission explained how Qwest's wholesale loop costs include retail costs and that the concern Antonuk raised about the "double collection" of costs for umbilical facilities indeed exists.

17. The Commission's remaining concern arises because of statements in Million's testimony. Million asserts that the SGAT conforms to the Commission direction, but then she testifies that Qwest's tandem transmission costs include a "weighting" for interoffice transport costs because such facilities function as interoffice transport, not as loop facilities.

18. The Commission's remaining concerns follows. First, it is not clear how Qwest's weighting includes and excludes costs for the various umbilical facilities. If this concern is addressed by not assessing tandem transmission charges of traffic traversing umbilicals, then Qwest may have satisfied the Commission's concern. Second, it is not clear what umbilical costs Qwest includes, on a weighted basis, in tandem transmission charges. If Qwest means to suggest, for example, that costs for umbilicals such as those from the Helena Main (the host) to Helena North (the remote) are given a weight of zero, then the tandem transmission rate may properly exclude facility costs that should not be double recovered. Because this issue is not unambiguously resolved, the Commission reserves it to the next cost docket. In the interim the Commission approves of the stipulated settlement of this issue.

3. Line Sharing OSS (Operations Support System) Costs

a. Testimony and Background

19. As background, the Commission's 271 Final Public Interest Report (July 8, 2002) identifies line sharing as an issue that needs resolution. As further background, in D2000.6.89 Qwest filed testimony and cost studies in support of its OSS costs for line sharing. As Qwest's testimony contained an error, the Commission's approval of the

stipulation in that docket included Qwest's line-sharing OSS rate as a per-order nonrecurring charge.

20. In this docket, Qwest's witness Million claims that this charge should be a recurring assessment.[7] As reflected in Exhibit TKM-1, Qwest requests that the Commission approve of and make this charge a recurring charge.

b. Commission Finding: Line Sharing OSS Costs

21. The Commission approves of this docket's stipulation correcting the charges for line sharing.

4. Line Sharing, Line and Loop Splitting[8]

a. Testimony and Background

22. As background, the Commission's 271 Final Report on Emerging Services includes decisions on line sharing (January 11, 2002, pp. 2-18). In that report the Commission allowed for the deferral of costing and pricing issues. The Commission's 271 Final Public Interest Report (July 8, 2002) identifies an outstanding emerging service cost issue that involves line sharing. This "reverse line sharing" issue involves how Qwest ties its provision of Megabit service to its provision of voice services.

23. As Qwest's policy witness Cheryl Gillespie testifies that whereas the current retail offering ties the "DSL data product to the underlying voice service," the Commission is concerned about customers that lose their Qwest DSL (digital subscriber line service – Qwest's Megabit service) if their voice service is then provided by a competitive local exchange carrier (CLEC). She asserts that Qwest agreed to provide CLECs that use UNE-P (unbundled network element platform) the ability to provide DSL (an apparent reference to Qwest's Megabit service). CLECs may also resell Qwest's DSL

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[7] As corrected, Qwest's price list would include two recurring charges for shared lines. The shared-loop rate recovers the value of the high-frequency portion of the loop and the OSS charge would recover Qwest's expenses for changing its OSS to implement the line-sharing UNE. (DR PSC -014)

[8] Line sharing regards the unbundling of the high-frequency portion of the local loop. Line sharing permits a CLEC to provide xDSL services over the high-frequency portion of the same loop over which the ILEC provides voice service. Line splitting is when two different CLECs provide the voice and data services over the same loop, which has been acquired as a UNE-P from the ILEC. Loop splitting is similar to line splitting but only involves the loop UNE.

service. She adds that in its 271 review the Commission determined that Qwest should also offer a "stand alone DSL service – unrelated to the voice service." She argues, however, that this debate is premature given the FCC has not made a determination of the policy considerations and that such a retail service would be interstate and deregulated: therefore it is "not an appropriate topic for this wholesale pricing proceeding."

24. Qwest witness Kathryn Malone testifies on how loop splitting allows CLECs and DLECs (data LECs) the opportunity to offer advanced data services simultaneously with an existing unbundled loop by using the frequency range above the voice band on a copper loop. The advanced data service may be provided by the customer of record or another data service provider chosen by the customer of record. She notes that unlike UNE-P loop splitting Qwest only provides the loop. Loop splitting involves recurring and nonrecurring rates.[9] Malone adds that because the identical functions are performed for both line sharing and loop splitting the rates for line sharing apply to the rates for loop splitting. The only difference between the two is who owns the loop.

25. Qwest witness Georganne Weidenbach also addresses line sharing, line-splitting and loop-splitting issues. Her exhibits illustrate line sharing, line-splitting, and loop-splitting (GW-3). Although Qwest already has line-sharing rates, she describes line sharing and the associated network architecture as background for the line and loop splitting issues. Through line sharing, Qwest provides voice service to the end-user using the voice-band frequencies (below 4 KHz) while a CLEC provides data service on the frequency range (above 25 KHz) above the voice band. Although several line sharing arrangements are possible, Qwest permits only those (three) types that do not degrade voice service significantly, one of which is ADSL (Asymmetric DSL).

26. Weidenbach describes how Qwest routes its own voice calls with line sharing through its network and she explains how Qwest routes calls for collocated CLECs. Voice and data are "split" with a frequency-separating POTS (plain old

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[9] There are recurring rates for (1) Interconnection Tie Pairs, (2) OSS, and (3) CLEC-CLEC connections and nonrecurring rates for (1) basic installation, (2) reclassification, (3) Splitter shelf, (4) Splitter Tie Cable Options (Common area, IDF, MDF), (5) engineering and (6) CLEC-CLEC connections.

telephone service) splitter. POTS splitters are required in the central office and at the end-user location. Termed "Splitter Collocation," splitters may be placed in one of three locations in an end office. Weidenbach presents technical details of splitter collocation. She asserts that the cost to Qwest varies with respect to the location at which a CLEC chooses to collocate.[10] She also discusses the associated cost of cross connects. She cites the FCC's line-sharing order as a basis for differentiating line-sharing charges with respect to a CLEC's collocation choice. She disputes past claims by CLECs that intermediate distribution frames (IDFs) are not part of a necessary line-sharing architecture.[11]

b. Commission Finding: Line Sharing, Line and Loop Splitting

27. The Commission accepts the stipulated settlement of this issue. However, the Commission's concern with Qwest's tying its provision of its DSL service (Megabit) to its own provision of loops remains. The Commission continues to agree with the reasoning of the facilitator for the 271 process that the most logical conclusion to draw from the record is that Qwest's refusal to continue to provide Megabit services in these circumstances:

- is more than likely the result of its intention seeking to retain voice service by creating consequences to switching voice services that Megabit customers are particularly likely to see as adverse in the current marketplace; and,
- inhibits competition for voice services (for customers now taking or likely to take Megabit services), whatever Qwest's underlying intention may be.

The Commission finds Qwest's argument, to not provide for reverse line sharing because it is not legally required to do so, to be symptomatic of its market power. This issue remains a Commission concern that, depending on the outcome of and challenges to the FCC's recent Triennial Review Order, may be revisited in Qwest's next wholesale cost and pricing docket. In the interim, this issue need not derail the stipulation reached in this docket. The Commission strongly encourages Qwest to voluntarily continue to offer

[10] Common-area collocation requires not only more cabling than collocation-area collocation but also more costs in terms of installation, maintenance, and repair.

[11] According to Qwest, an IDF is "a frame shared by Qwest and CLECs that provides a fair, efficient and non-discriminatory way for CLECs to combine or access UNEs themselves." (DR PSC -028)

DSL (Megabit) service when other carriers replace Qwest as the provider of voice service.

5. Subloop Unbundling

a. Testimony and Background

28. As background, on January 11, 2002 the Commission issued its 271 Final Report on Emerging Service issues, one of which is subloop unbundling. The Commission referred the costing and pricing aspects of subloop issues to a subsequent proceeding:

> *In its comments, AT&T now agrees that costing and pricing issues belong in a cost proceeding, not this 271 proceeding. It is evident from Qwest's responses to the Commission's questions that cost and price issues exist, deferred out of this docket and otherwise not addressed by the Stipulation in D2000.6.89, for which Qwest will initiate a separate cost and price proceeding. In advance of Qwest's filing that addresses deferred cost and price issues, the Commission expects Qwest to list (see above response to Question # 5) those new and those deferred cost and price issues by February 8, 2002. (Final Report, p. 26)*
> *The Commission finds valid AT&T's interpretation of Antonuk's resolution: a CLEC may begin access and installation before the inventory or LSR process is complete. Qwest submits no objection to this preliminary finding. As for the cost of inventories, since there must be a new costing and pricing proceeding and since this issue is not addressed here, nor in the Commission's final order on the D2000.6.89 Stipulation, the only recourse is a deferral to a proceeding that addresses the related issue of cost sharing among users. (Final Report, p. 41)*

29. In this docket, Teresa Million asserts that Qwest addressed the deferred subloop issues by (1) introducing a new subloop subsection for Multi-Tenant Environment (MTE) Terminal Subloop Access and (2) introducing two new subloop subsections that were not part of the Stipulation in D2000.6.89. (DR PSC -013) Million defers to Qwest witnesses for a more detailed explanation.

30. William Easton defines a subloop as "any portion of the loop that it is technically feasible to access at Qwest accessible terminals located throughout the outside plant." At present, Qwest does not have Commission approved rates for either

the Intra-Building Loop product or for the Multi Tenant Environment – Point of Interconnection (MTE – POI).[12]

31. The Intra-Building Cable Loop product allows CLECs that have placed outside plant to access a Qwest riser cable, or inside wiring, through a building terminal. Either the CLEC, or the building owner, will place a common terminal or cross-connect facility near Qwest's existing terminal. Qwest proposes both recurring and nonrecurring intra-building rates for loops.[13]

32. Easton describes the MTE – POI as the demarcation point or network interface within a multi-tenant building used by CLECs to access the unbundled intra-building cable subloop. He adds that a MTE Terminal is an accessible terminal in a multi-tenant building or an accessible terminal physically attached to a multi-tenant building. To create the MTE-POI a CLEC must create a cross connect field at the MTE Terminal that allows it to connect its facilities to Qwest's facilities. CLECs may only place cable facilities at the MTE Terminal. For MTE-POI, Qwest proposes a nonrecurring charge, per request, that relates to the loading of CLEC inventory into Qwest databases.

33. Rachel Torrence describes subloops generally and then defines a subloop as any portion of a loop that a CLEC may have access to, when technically feasible, at accessible terminals throughout Qwest's outside plant network, including inside wire. She defines an "accessible terminal" as any point on a loop where a technician can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within.[14] Either Qwest or a building owner may own the inside wire (Intra-Building Cable) in a building including those with multiple tenants.

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[12] Rates for distribution subloops and feeder subloops were set in the prior wholesale-price docket. (DR PSC -021)

[13] A recurring charge applies to each loop. Nonrecurring intra-building cable loop charges apply in the case of "dispatch" or "no dispatch (1st and each additional loop)."

[14] Such points include: poles, pedestals, NIDs, MPOE, SPOI, MDF, remote terminal FDI and SAI. Splice cases are like "seams in fabric" and are to be opened or accessed repeatedly. A network interface device (NID) is an example of an accessible terminal. (DR PSC -022) A remote terminal is not a switch but the end of a DLC system. (DR PSC -007)

34. The type of access to a MTE or a multi-dwelling unit (MDU) that a CLEC obtains will depend on the building owner's optional arrangement with Qwest. Qwest's Cable Wire Service Termination Policy (CWSTP) allows four options.[15] The availability of direct access to an MTE terminal depends upon the CWSTP option selected by the property owner and the type of terminal employed. Each option defines the location of the demarcation point between Qwest and the building owner.[16] To obtain access to facilities owned by Qwest, a CLEC may select either Option 2 or 3 of the CWSTP. To obtain access to facilities belonging to a building owner, a CLEC must make arrangements with the owner. Torrence refers to Easton and Million for testimony on products and costs respectively.[17]

b. Commission Finding: Subloop Unbundling

35. The Commission accepts the stipulated settlement of the issues involving sub-loop unbundling and finds that the services and related fees should be included in the SGAT.

6. UNE Combinations

a. Testimony and Background

36. Teresa Million testifies that in D2000.6.89, the Commission approved nonrecurring rates for the unbundled network element platform (UNE-P) for conversions and new connects. Qwest estimates and proposes such charges for the present proceeding. The studies estimate the cost to convert a POTS service customer to a UNE-P POTS. Estimates are separately identified for mechanized and manual orders. To

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[15] The four options include: 1) at the MTE NID that is also the minimum point of entry and the demarcation point where Qwest ownership and control ends and the property owner's begins, obtained at the protector field or at the inside wire appearance; 2) at the demarcation point at the floor level in a multi-story building obtained at the MPOE protector field or the floor level NID; 3) at a demarcation point located either in a suite or apartment unit at the MPOE protector field or at the customer cross-connect of Qwest's inside wire; or 4) at a field connection point involving collocation processes for campus environments. The MPOE is a terminal placed near but detached from MTE buildings.

[16] Torrence defines the demarcation point, for this discussion, as that point where Qwest-owned facilities cease, and CLEC, end user, owner or landlord ownership begins.

[17] Million only provides "recurring cost studies for Intra-Building Cable."

calculate these charges, Qwest asserts to generally use the same methods used in the prior docket. However, Qwest adds some additional work activities to account for the complexity of some combinations. In this docket Qwest identifies the nonrecurring costs for elements such as UNE-P PBX DID trunks, UNE-P ISDN BRI and UNE-P ISDN PRI.

37. Kathryn Malone's testimony notes that a "UNE Combination" is a group of UNEs that Qwest provides to CLECs in a combined state. The new UNE combinations proposed in this docket include the UNE-P, Loop Multiplexing Combination (LMC) and EEL. The recurring monthly charges for each individual UNE are combined to form the UNE-P.[18] Nonrecurring charges are based upon the type of UNE-P combination.

38. Rachel Torrence describes two standard UNE combinations 1) the unbundled network element platform (UNE-P) and 2) Enhanced Extended Loop (EEL). UNE-P combines unbundled loop, unbundled local switching and shared transport.[19] UNE-P includes a loop, a switch port, switch use, shared transport, optional vertical switch features, and access to interLATA and intraLATA toll service, 911 service, operator services, and directory assistance.

39. EELs allow CLECs to serve end-users whose loops terminate in offices without collocated CLEC equipment. EELs consist of loop and dedicated office transport but may include multiplexing and concentration capabilities. Qwest offers two options under the EEL product: (1) point-to-point -- consisting of loops and transport (UDIT) of the same bandwidth that extends from the CLEC's collocation or premises to the end user in a different wire center and (2) multiplexed -- which allows the CLEC to combine different bandwidths. Either is available at DS0, DS1 or DS2 levels. As a condition to order an EEL a CLEC must "self-certify" to Qwest that the EEL will be used to provide a significant amount of local exchange traffic to a particular end user, per the FCC

[18] The noted UNE-Ps include: 1) ISDN; 2) PBX DID; 3) PBX Trunks and 4) Loop Mux Combinations for DSO and DS1 Loops and Multiplexing (DS0 to DS1 and DS3 to DS1). Other UNE combinations may be provided via a Bona Fide Request (BFR).

[19] The six UNE-P combinations include: UNE-POTS, UNE-P-ISDN-BRI, UNE-P-DSS, UNE-P-PBX, UNE-P-Centrex**,** and UNE-P-PAL. (DR PSC -025)

Supplemental Order Clarification FCC 00-183; apparently this condition applies to both "EELs and Conversions." To certify local use, CLECs have three options.[20]

40. Torrence also describes Qwest's LMC. She asserts that LMC is either the combination of an unbundled loop and multiplexing functionality of (sic) the combination of an EEL loop with multiplexing functionality located within the same Qwest wire center. LMC is comprised of the loop itself and the multiplexing function which converts a transmission from DSO to DS1 and/or DS1 to DS3. CLECs can aggregate loops to improve transmission efficiency.[21]

b. Commission Finding: UNE Combinations

41. The Commission accepts the stipulated settlement of the issues involving sub-loop unbundling and finds that the services and related fees should be included in the SGAT.

7. Unbundled Dark fiber

a. Testimony and Background

42. Dark fiber is optical fiber that is installed, usually in the ground or right of way, through which no light is being transmitted and therefore is not carrying any signal. Dark fiber can be converted into lit fiber by the addition of electronic equipment to enable the generation, transmission, and reception of light signals. In its *UNE Remand Order* the FCC likened dark fiber to a copper loop that was in place and ready to serve a customer, but not in service yet, and noted that it could be used by competitive LECs without installation by the incumbent. The FCC found that dark fiber falls within the loop network element's definition of "facilities, functions, and capability" and concluded

[20] The three options include: 1) the CLEC must exclusively provide local service to the end user and one end of the EEL must terminate in the CLEC's collocation and there is no minimum local usage required by circuit; 2) the CLEC must handle 33 percent of the end user's local traffic and the EEL circuits must carry a minimum percentage of local traffic and one end of the EEL must terminate in the CLEC's collocation; and 3) the CLEC must provide a minimum percentage of local service across their EEL circuits and one end must terminate at the CLEC's premises.

[21] LMC differs from PBX traffic concentration in that LMC is for wholesale loop aggregation and PBX is for multiple-station aggregation on a single loop. (DR PSC -026)

that it is within the statutory definition of a network element and should be available to be unbundled for purchase by a CLEC.

43. In the multi-state 271 process a number of the CLECs requested the ability to purchase a single strand of dark fiber. In response Qwest proposed to offer single strand of dark fiber in the Colorado 271 workshop and the proposal was carried forward into the multi-state process. Qwest proposed to modify the Dark Fiber inquiry form and its internal procedures so this product could be offered and also to modify the SGAT in the multi-state process to offer the same service. The participants in the multi-state 271 proceeding did not object to the proposed modifications, but AT&T identified a technical publication that Qwest had committed to update to be consistent with the SGAT but which had not at the time been completed. AT&T identified this as an unresolved issue. The facilitator treated the issue of the single strand offering as resolved in the proceeding and dealt with the specific issue of consistency of the SGAT with technical publications in another part of the proceeding.[22] Even though there was no dispute concerning single strand dark fiber offerings remaining from the 271 proceeding, there was also was no Commission reviewed and approved set of prices for single strand dark fiber in Montana.

44. In this proceeding Qwest is proposing to make available the following new wholesale network elements for dark fiber:

> Unbundled dark fiber – single strand or fiber;
> Unbundled dark fiber – extended unbundled dark fiber (single strand or fiber);
> Unbundled dark fiber – Interoffice fiber IOF (single strand or fiber);
> Engineering verification; and
> Dark Fiber Splice.

45. Normally CLECs would connect with dark fiber facilities in Qwest's wire center and would combine this capacity with their own facilities or with other Qwest unbundled network elements, or UNEs. The first new UNE above, Unbundled Dark Fiber – single strand or fiber is defined as a single strand or pair of optical fibers with no electronic equipment attached that goes from the wire center to a splice, FDP (fiber

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[22] See page 50 of the *Facilitator's Third Report – Emerging Services*, June 11, 2001 and pages 14 and 23 of the *Final Report on Qwest Compliance with Two Emerging Service Items: Dark Fiber and Packet Switching*, Montana Public Service Commission, February 6, 2002.

distribution panel) or customer location. The CLEC must be collocated in Qwest's wire center where the unbundled dark fiber terminates. Extended unbundled dark fiber (single strand) is similar, but runs between a Qwest wire center and a CLEC wire center. UDF-IOF (unbundled dark fiber – interoffice fiber) is unlit fiber strands or cables connecting two points (fiber distribution panels) within Qwest's network.

46. Qwest's witness Million provides the cost and rate development support in her testimony for both recurring and nonrecurring costs for single strand dark fiber. In addition Million presents Qwest's proposed nonrecurring costs for dark fiber splices and for field verification when an engineering verification is done without a quote preparation (Cost Study #6413). The non-recurring costs included the directly assigned labor rates from the general ledger journal file based upon the function being performed, and are forward looking. The direct labor rates include wages and salaries, supervision and support, benefits and miscellaneous costs. The time estimate is obtained from the subject matter expert who represents the groups doing the work. The costs also include expenses based upon factors including commercial marketing, network support, directly attributable and common costs.

47. Easton describes the two services covered by the nonrecurring charges. In order to accommodate a CLEC request for access to a Qwest fiber loop or subloop (as a UNE), if space permits Qwest will provide to the CLEC a fiber stub from an accessible splice point. This service is labeled a Dark Fiber Splice. The engineering verification recurring charge covers the cost of searching for splicing locations and splicing availability. The CLEC starts the process by requesting a Field Verification Quote Preparation (FVQP), but if a splice for a single strand is not available Qwest will terminate the process and the CLEC will be billed for the engineering verification work. Or if a single strand splice is available, the CLEC can still discontinue the process before full FVQP is completed, and it will be billed for the engineering verification but not the full FVQP.

b. Commission Finding: Dark Fiber

48. Qwest has proposed three new wholesale network elements for unbundled dark fiber. These are unbundled dark fiber-single strand, UDF – extended, and UDF – interoffice – single strand. Qwest also proposed to make available for purchase –

Engineering Verification and Dark Fiber Splice. The Commission accepts the stipulated settlement of the issues involving single strand dark fiber offerings or new services. The Commission approves the proposed new services, including the rates, terms and conditions.

8. Packet switching

a. Testimony and Background

49. The FCC defined packet switching in its *UNE Remand Order* as "the function of routing of individual data units or 'packets,' based on address or other routing information contained in the packets." In the *UNE Remand Order* the FCC required packet switching to be unbundled and offered to CLECs for purchase by the RBOC, but only if certain conditions hold true. These conditions are that the RBOC has provided end users with loops aided by digital loop carrier or has a system in which copper loops have been replaced with fiber optic equipment in distribution facilities; the RBOC does not have spare copper loops that are adequate to provide home run capability;[23] the RBOC has not permitted the CLEC to deploy its own DSLAM[24] equipment at the RBOC remote terminals or other suitable interconnection point in the area in question; and the RBOC has deployed packet switching capability for its own use.

50. In the 271 docket AT&T objected to Qwest's proposed ICB (individual case basis) pricing for unbundled packet switching. AT& T argued that Qwest must provide specific prices for packet switching in the SGAT. AT&T argued that the FCC's has supported the proposition that checklist compliance could be denied for failure to specify any price at all for an element. Qwest responded in its brief that it was developing packet switching prices which it believed would be done before the company would make its FCC filing for 271 approval. Qwest argued that its approach to pricing using ICB, subject to true up, was adequate in the interim. The facilitator accepted

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[23] Essentially this means equivalent capability to carry high speed digital voice and data service.

[24] Digital Subscriber Line Access Multiplexer. The DSLAM does the routing and programming of the data packets. A reason the ILEC might not allow a CLEC to site its own DSLAM at a remote terminal is that there may not be the physical space for additional equipment.

Qwest's argument as the only feasible approach, considering that the 271 workshops were not intended or capable of functioning as cost proceedings, but found that there would be substantial benefit from completing that effort as soon as possible.[25] In its review and report on emerging services, the Commission accepted the facilitator's view of the issue, but directed Qwest to add pricing for unbundled packet switching to the cost docket it had committed to file in 2002 as resolution to other issues in the 271 docket.

51. Under Qwest's unbundled packet switching proposal the CLEC can either purchase the distribution subloop and provide both voice and data service to its customer, the CLEC can choose line-sharing over the distribution subloop, or the CLEC can buy the distribution from another CLEC who has bought the entire loop using UNE-P. Qwest proposes the following recurring rate elements to implement unbundled packet switching: unbundled packet switch customer channel; DSLAM functionality at the remote terminal; unbundled packet switching interface port at the DS1 or DS3 level. Unbundled packet switching only covers the "feeder" portion of the loop, e.g. the portion from the CLEC/Qwest demarcation point in the central office through and including the feeder distribution interface. The unbundled packet switch customer channel charge is intended to cover the service and cost of providing the remotely deployed (Qwest) DSLAM and the virtual channel from the DSLAM to the CLEC/Qwest demarcation point at the central office containing Qwest's ATM[26] switch. The second charge covers DSLAM functionality at the remote terminal although to use this the CLEC needs to also purchase the unbundled sub-loop element or provide its own facilities. The third available element is the unbundled packet switch port at the DS1 or DS3 level which provides the port that the CLEC uses to connect to its own ATM switching network for its customers served via unbundled packet switching. Qwest also proposes a non-recurring charge for the three distribution loop options. Million testifies that the non-recurring charges for unbundled packet switching vary because the activities differ depending upon the way the CLEC chooses to purchase the subloop.

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[25] See pages 45-46, the Facilitator's *Third Report-Emerging Services*, June 11, 2002.
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[26] Asynchronous Transfer Mode

b. Commission Finding: Packet Switching

52. In the 271 multistate proceeding Qwest proposed to make available unbundled packet switching (subject to the conditions set by the FCC and described above) based on individual case basis (ICB) pricing. One party objected to the ICB pricing arguing that ICB pricing does not satisfy 271 checklist compliance. Qwest argued that ICB pricing was sufficient considering the low volume of this service and that it would be proposing specific rates prior to its filing with the FCC for 271 approval. The Commission accepts the stipulated settlement of the issues involving packet switching prices and approves these rates for inclusion in the SGAT.

9. Digital capable loops

a. Testimony and Background

53. In the 271 proceedings Qwest agreed to provide CLECs access to additional types of high capacity loops; these include OC3, OC12 and OC48 capacity loops. These loops can transport bi-directional high capacity signals.[27] The loops run from Qwest's wire center to the end-user's premises. Million testifies that the recurring cost elements for OC loops reflect the investment in electronics and fiber. She also testifies that the non-recurring costs for these loops are the same as with DS1 and DS3 capable loops and therefore the same rates are proposed to be used as were adopted in D2000.6.89 for DS1 and DS3 capable loops. However Qwest proposes a new option be available for installation – Basic Installation with Cooperative Testing. Qwest also proposes to reduce the rate for Basic Installation with Performance Testing to match the proposed rate for Basic Installation with Cooperative Testing because the activities involved in bother services are similar and so therefore are the costs.

b. Commission Finding: Digital Capable Loops

54. In the 271 multistate proceeding Qwest agreed to provide CLECs access to additional types of high capacity loops including OC3, OC12 and OC48 capacity loops. Besides offering these high capacity loops, Qwest has proposed in this docket to offer Basic Installation with Cooperative Testing and to reduce the rate for Basic

[27] To illustrate the capacity of these loops, Million states that an OC3 is the equal to 3 DS3s or 2,016 DS0 equivalent channels (p. 15). A DS0, or digital signal level zero, is a voice-grade channel whose speed is 64 kilobits per second.

Installation with Performance Testing to the same as proposed for Basic Installation with Cooperative Testing. Both have nonrecurring rates. The Commission accepts the stipulated settlement of the issues involving digital capable loops and approves the services and rates as proposed by Qwest for inclusion in the SGAT.

10. Double Recovery of Trouble Isolation Charges

a. Testimony and Background

55. In the multi-state 271 proceeding AT&T's witness, Kenneth Wilson, took issue with Qwest's charges for trouble isolation on the customer's line because he claimed Qwest charges CLECs for trouble isolation[28] when the trouble is not in Qwest's loop, but does not offer to pay for the work by a CLEC when the CLEC incurs costs to isolate trouble on Qwest's loops. He also contends that Qwest double charges in some cases where the trouble is in the inside wire or user terminal. AT&T sought to preserve its ability to challenge in subsequent cost proceedings the issue of double recovery of trouble isolation costs. As noted elsewhere, the multi-state 271 proceeding was not a suitable vehicle in which to examine the specific issues raised by cost analyses or rate design. The facilitator in the multi-state 271 proceeding noted that there was nothing in his report that should be viewed as prejudging the merits of SGAT charges, should they be raised in cost dockets in the individual states.[29]

56. The Commission's January 30, 2002 Final Report on checklist access to unbundled network elements and unbundled loops notes this possible double recovery of trouble isolation charges.

The Commission's finding in the report includes:

> *Referring the possible double recovery issue to a cost docket is not possible in Montana. The cost docket (D2000.6.89) was settled via a stipulation between parties and is closed. The Commission in its Preliminary Report on Workshop 2 Emerging Services-Dark Fiber and Packet Switching, released for comment on November 7, 2001, has an inquiry to Qwest regarding development of packet switching prices. The Commission put forward here a similar, but broader, inquiry to Qwest regarding how Qwest will respond to the various 271 issues not covered by the stipulated settlement which have been deferred to a cost docket.*

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[28] Trouble Isolation Charge (TIC).

[29] See pp. 7-8 of the *Unbundled Network Element Report*, John Antonuk, Liberty Consulting, August 20, 2001.

Qwest has responded that it will initiate a cost proceeding early in 2002. (footnotes excluded)

57. As evident from the above and as a result of its 271 review the Commission expressed concern with possible Qwest "double recovery" of some maintenance costs. The concern arose because of AT&T's allegation that Qwest not only assesses trouble isolation charges for certain failures but also applies maintenance cost factors to UNE cost development. Million refutes this concern; she asserts that Qwest has not applied costs recovered by TIC charges in developing the company's UNE costs. AT&T did not intervene in this case and no other party has addressed the issue.

b. Commission Finding: Trouble Isolation Charge

58. In the 271 multistate proceeding AT&T asserted that Qwest's Trouble Isolation Charge may in some cases result in double charging for trouble isolation costs. The Commission accepts the stipulated settlement of the issues involving trouble isolation charges and will not require Qwest to change any of its costing or pricing for TIC. This does not imply that there is no issue with TIC, but instead that the record is insufficiently developed. It also does not imply that there cannot be a review of the issue in an appropriate setting. As the TIC has been an issue in other proceedings, these or other aspects of the TIC may be raised again in a future PSC proceeding.

10. Enhanced Extended Loops (EELs)

a . Testimony and Background

59. An enhanced extended loop or EEL is a combination of loop and dedicated interoffice transport which can include multiplexing or other capabilities. By using EELs CLECs can provide service for their customers without having to incur the expense of collocating in the central office where those loops terminate. Torrence testifies that Qwest is proposing an EEL product (called EEL Link) with two options. The first is called a Point-to-Point EEL. A Point-to-Point EEL has loops and interoffice transport of the same bandwidth from the CLEC collocation or premises to the CLEC's customer in a different Qwest wire center. The other EEL option, Multiplexed EEL, allows the CLEC to have EEL combinations of different bandwidth and is comprised of a loop, interoffice transport and multiplexing. As described earlier in the section on UNE Combinations, with either of these EEL options the CLEC must certify that the EEL will

be used to carry a significant amount of local exchange traffic, not just used to carry long distance traffic.

60. Easton testifies that Qwest is proposing a flat recurring charge for DS0 2-wire and 4-wire loops, DS1, and DS3 EEL Links. Qwest is also proposing a non-recurring charge for each of the preceding types of EELs and a non-recurring charge for EEL transport multiplexing for DS1 to DS0 and DS3 to DS1.

b. Commission Finding: Additional EEL Products

61. The Commission accepts the stipulated settlement of the issues involving EEL products and finds that the services and related fees should be made available for purchase by CLECs through the SGAT.

11. Poles, ducts, conduit, and right-of-way (ROW)

a. Testimony and Background

62. In the 271 proceeding concerning this checklist item, Checklist Item #3, access to poles, ducts, conduit, and right of way, one intervener asserted that Qwest included non-recurring charges in its proposed SGAT for inspections to determine if space is available for attachment or occupancy and that its proposed nonrecurring charges were undocumented and excessive. The facilitator in that docket recommended deferring the issue of nonrecurring charges for inspections to the cost dockets in the individual states.[30] Another intervener in the 271 docket recommended that the Section 10.8.2.14 inspection schedule have as many fixed fees in it as possible, rather than fees charged on an individual-case basis, so that CLECs could know in advance what the likely fees will be for its own business planning purposes. In his report to the state commissions the facilitator did not recommend changes to the existing SGAT language to reflect this proposal. The Commission adopted the facilitator's finding in its report concerning Qwest's compliance with Section 271, but included a suggestion to Qwest that as the wholesale or carrier-to-carrier market developed, a clearly defined schedule of fees be developed to the extent possible.[31]

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[30] See *Paper Workshop Issues,* March 19, 2001, page 11.

[31] See page 27, *Final Report on Qwest's Compliance with Checklist Items, 3, 7, 8, 9, 10 & 12 and Responses to Comments Received on Preliminary Report*, Montana Public Service Commission, September 6, 2001.

63. In this docket Qwest is proposing several nonrecurring charges for pole, duct, conduit and right-of-way ROW work – the ROW inquiry fee and the ROW documentation preparation fee; fee for Field Verification – pole, fee for Field Verification – manhole, planner verification fee – manhole, manhole verification inspector fee – per manhole, manhole make-ready inspector fee – per manhole; transfer of responsibility. The ROW inquiry fee is to cover the cost of Qwest's review of a request of ROW for completeness and resolution of discrepancies. Qwest does not retain public ROW records but does have ROW records for private ROW, BLM, Bureau of Reclamation, Forest Service and other public lands. The ROW documentation preparation fee is to cover Qwest's cost of preparing a quit claim deed when requested by the CLEC. Qwest is proposing a field verification fee which is nonrefundable fee paid upfront by a CLEC to cover the cost of a field survey to cover the cost of a pole inspection and related work. Instead of Qwest doing the work the CLEC can choose to do the field verification itself and avoid the fee.

64. The CLEC also has the option of doing field verification of manholes, or if it chooses, Qwest will either do the field inspection or its field engineer will contract it out. The activities covered include opening the manhole, including pumping out water and eliminating any gases; setting up traffic controls around the work area; sketching the duct structure and converting the sketches to permanent drawings. The drawings are reviewed by other facility planning personnel who are responsible for determining availability of space in the innerduct or conduit. The results of the review of the availability of space along the CLEC's requested route are summarized in a Field Verification report which is passed along to the customer through the account team. Qwest is proposing a fee for the Field Verification report. Whether the CLEC's interduct work is done by a contractor or the CLEC, Qwest will follow-up with an inspection to ensure that safety and construction standards have been followed.[32] Qwest witness, Rachel Torrence, testifies that Qwest's proposals in this case provide access to Qwest's poles, ducts and right-of-way in a workable, reasonable and nondiscriminatory manner.

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[32] See Torrence, p. 34.

She also testifies that the proposed costs are consistent with and reflect the actual tasks Qwest's engineers and other personnel must perform to provide CLECs access to Qwest's network.

b. Commission Finding: Pole, Duct, Conduit, and Right-of-Way

65. The Commission accepts the stipulated settlement of the issues involving poles, ducts, conduits and right-of-way and the Commission finds that the services and related fees should be included in the SGAT.

12. Collocation

a. Testimony and Background

66. Collocation is a regulatory term that describes an interconnection arrangement between a Competitive Access Provider (CAP) and a Local Exchange Carrier (LEC). With collocation the CAP's fiber multiplexer is placed in or near the LEC central office. In a collocation arrangement, a subscriber to CAP services can use the LEC-owned access line from their site to the LEC central office, but have the access line terminate on the CAP fiber ring (instead of the LEC switches) for CAP-provided services. The CAP must pay a special tariff to the LEC for use of the LEC access lines.

67. The proposed collocation rate elements addressed in this docket are: OCn (optical carrier) Single Collocation Terminations, Space Availability Report, Collocation Space Option Fee, Collocation Space Option Administration Fee, and Collocation Cable Augment QPF.

68. Qwest filed cost data for several elements related to collocation. These elements are included in the following TELRIC studies: Space Inquiry and Space Availability Report (Study #6297); Direct CLEC to CLEC Interconnection (Study #6318) – additional elements; Cable Augment QPF (Study #6552); Space Optioning (Study #6296); and Remote Terminal and Virtual Remote Collocation (Study #6425). Exhibit TKM-1 contains a summary of the results for these cost studies. Qwest explained that the space inquiry report provides CLECs with information regarding the existing collocation conditions within an office. The report provides the CLEC with (1) the number of CLECs collocating in an office, (2) the amount of collocation space available in an office, (3) a description of the measures under way to make additional space available for

collocation, and (4) the modifications in the use of space since the last report. The charge for the space inquiry report applies on a "per office" basis each time a report is requested.

69. Qwest witness million describes the additional elements submitted for direct CLEC-to-CLEC interconnection. Qwest explained that CLEC-to-CLEC interconnection allows one CLEC to directly interconnect with another CLEC within the same Qwest central office.[33] CLEC-to-CLEC connections are also available when a CLEC with multiple collocations in the same office wishes to connect those collocations. CLEC-to-CLEC interconnection may involve physical-to-physical, physical-to-virtual, or virtual-to-virtual collocation. Qwest presented the various types of CLEC-to-CLEC connections in the prior cost docket. However, the previous study did not include charges for engineering, installation or cable racking for fiber cables.

70. Qwest's witness Million testified that the collocation space option will permit CLECs, Qwest and Qwest affiliates to option space for future collocation needs. Space reservation options provide the CLEC with a first right of refusal on collocation space when requests are made by other parties with firm collocation orders. This option allows the CLEC to guarantee that space will be available when it is needed even if the CLEC has no immediate collocation plans. However, if another party then makes a firm request for collocation, the CLEC may decide to exercise its option and make its own firm request for collocation or give up the space if it is unable to use the space. The nonrecurring costs for space optioning are based on costs Qwest incurs to administer collocation space option requests. The study (#6296) identifies costs associated with application processing, feasibility determination, common space engineering, records management, and administration of the first right of refusal process.

71. Million explains that virtual remote collocation includes half-hourly rates for engineering, maintenance, installation and training. Both virtual remote and remote terminal collocation include charges for available space in remote cabinets on a standard

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[33] As described in the testimony of Mr. Easton, a CLEC can also order CLEC-to-CLEC cross connections, using an intermediate distribution frame. This arrangement utilizes Commission-determined rates for Interconnection Tie Pairs ("ITPs"), the costs of which were part of the Collocation study presented in the prior cost docket. CLEC-to-CLEC cross connections also require a nonrecurring charge which is calculated in Qwest's ENRC (Study #6413).

mounting unit ("SMU") level. An SMU is a standard measurement of vertical space, in this case 1.75 inches, within a hardened cabinet. CLECs are charged a flat rate on the basis of the number of SMUS their equipment occupies within a cabinet. The cost study (Exhibit TKM-2, Study #6425) includes elements for collocation space and the feeder distribution interface ("FDI") terminations.

72. The nonrecurring collocation space element includes the cost of the cabinet space, the cost of the cabinet, and all of the work and materials associated with placement of the cabinet and providing access to power. The cost study identifies the cost of materials, engineering, splicing, installation and rights of way. The recurring cost includes maintenance costs associated with this equipment, plus a small portion of the power pedestal. The nonrecurring FDI terminations (per 25 pair) element includes the costs associated with augmenting the FDI to provide the requested terminations. This includes the material, engineering and splicing costs associated with installing a Serving Area Interface ("SAI") 25 pair block, and the material, engineering, splicing and installation costs associated with the cable, conduit and innerduct required to connect the FDI to the remote collocation cabinet. The recurring FDI termination cost includes the maintenance costs associated with this equipment.

73. Million testifies that the remote collocation cost study identifies the material, engineering and installation labor costs associated with various equipment components (e.g., the cabinet, remote DSL pad, power pedestal, etc.) Needed to provide the remote terminal and virtual remote collocation elements. Expense factors are applied to the direct costs to derive the TELRIC and TELRIC plus common costs.

b. Commission finding: collocation

74. The Commission accepts the stipulated settlement of collocation issues and the Commission finds that the services and related fees should be included in the SGAT.

13. Switching studies

a. Testimony and background

75. Qwest submitted new switching-related rates in this proceeding. In the prior proceeding, Qwest developed switching rates for local usage, per minute of use ("MOU"), analog and digital line side ports, and separate recurring rates for a variety of

features. Qwest now provides those features plus additional features that are included in the analog and digital line side ports at no additional recurring cost, as well as nonrecurring rates for many of the features to cover the added cost of provisioning those features in the switch. Those nonrecurring costs are calculated in the ENRC (study #6413). In addition, Qwest has developed a separate rate for a feature known as CLASS CALL Trace (Study #6325). Finally, Qwest is submitting recurring and/or nonrecurring costs for three additional trunk ports including DS1 Local Message Trunk Port (Study #6360), DS1/DID Trunk Port (Study #6419), and DSO Analog Trunk Port (Study 6359).

76. Qwest witness Million testifies that CLASS Call Trace is not captured in any of Qwest's previously submitted switching costs, including the analog and digital line side port rates. The switching investment determined in the SCM does not reflect the elements presented in the CLASS Call Trace Study (Exhibit TKM-2, Study #6325) for two reasons. First, the CLASS Call Trace cost is developed on a "per event" basis to perform traces on calls on an as needed basis; it is not a monthly recurring charge. Second, the majority of costs for this service are based on the labor expenses of the group of people performing the traces, and the cost to store the data needed to complete the trace. These costs are not related to the switching investment used to calculate the costs for ports or MOUs. Thus, the switching cost included in the previous studies does not reflect the costs for this feature.

b. Commission finding: switching studies

77. The Commission accepts the stipulated settlement of the issues involving Qwest's switching studies and the Commission finds that the services and related fees should be included in the SGAT.

14. UDIT and EUDIT

a. Testimony and Background

78. Unbundled Dedicated Interoffice Transport (UDIT) is a network element that provides a CLEC with a single transmission path between two Qwest wire centers in the same LATA. Extended Unbundled Dedicated Interoffice Transport (EUDIT) is a network element that provides a CLEC with a bandwidth-specific transmission path between Qwest's Serving Wire Center and the CLEC's Wire Center, or an IXC's point of interface located within the same Qwest Serving Wire Center area.

79. In this docket Qwest proposes “fixed” and "distance sensitive” recurring charges for the OC-48 UDIT, a nonrecurring charge for the installation of the OC-48 UDIT, recurring rates for the OC48 E-UDIT and for the remote nodes and remote ports for E-UDIT OC3; OC12; and OC48, nonrecurring charges for the remote ports and for the OC48 E-UDIT, and UDIT rearrangement charges.

80. Qwest’s witness Easton testified that an UDIT rearrangement occurs when a CLEC may request that UDIT terminations be moved or rearranged at the CLEC demarcation point. A CLEC may also request that UDIT options be changed. Rearrangements may be ordered by the CLEC for working UDITs in place at single and dual office locations. Qwest also proposes a nonrecurring charges for UDIT rearrangements involving DSO single offices, DSO dual offices, high capacity single offices and high capacity dual offices.

81. Qwest’s witness Torrence testified that from a network perspective there is a substantial difference in the way a UDIT is provisioned as opposed to a EUDIT even though the end result looks deceptively similar. UDIT is a transport facility between two Qwest wire centers within a LATA. However, this is not simply a case of going from Point A to Point B. It is more likely to be a case of going from Point A to Point Z via multiple points in between. Qwest’s inter-office network has evolved over time and it consists of long transport lengths between wire centers with high bandwidth capacities capable of handling the volumes of traffic between wire centers. In efforts to fully utilize these long, large transport “pipes,” the concept of alternate routes has developed between Qwest wire centers. It is possible to efficiently and economically transport traffic from one Qwest wire center to another Qwest wire center by “hopping” via multiple wire centers across the LATA utilizing the existing high bandwidth inter-office facilities rather than using a direct point to point route. UDIT may be provisioned using this alternate route concept.

82. In contrast, EUDIT is a transport facility that extends from a Qwest wire center to a CLEC wire center or IXC POP. As such, EUDIT is geographically contained within Qwest’s serving wire center to which it is connecting. In provisioning EUDIT, Qwest utilizes the wire center’s existing loop facilities. The existing feeder and distribution loop network is migrated into service as makeshift inter-office facilities. In

contrast to true inter-office facilities like those between Qwest wire centers, inter-office facilities as they apply to EUDIT are of substantially shorter length and can be provisioned as Point A to Point B with specific distances and bandwidth characteristics. In general, one path will exist, and alternate routes are the exception rather than the rule.

83. As Qwest explained during the 271 process in Montana the CLECs argued that both UDIT and EUDIT provide effectively the same function (i.e., transport between two wire centers). Therefore, Qwest should not be allowed to offer these elements under different price structures. Qwest asserts it is more than just the fact that these elements are presented separately in Qwest's Exhibit A that drives the differences in cost structure for UDIT and EUDIT. The basic differences in the information available in Qwest's cost models and in the facilities used to provide these elements requires the different costing methods necessary to price them.

b. Commission Finding: UDIT and EUDIT

84. The Commission accepts the stipulated settlement of the issues involving UDIT and EUDIT rates and the Commission finds that the services and related fees should be included in the SGAT .

15. Switch UNE

a. Testimony and Background

85. Qwest witness Malone testified that access to unbundled local switching encompasses line-side and trunk-side facilities, plus the features, functions and capabilities of the switch. The features, functions, and capabilities of the switch include the basic switching function, as well as the same basic capabilities that are available to Qwest's end user customers. Unbundled local switching also includes access to vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions.

86. Qwest's witness Malone also testified that vertical switch features are software attributes of end office switches and Qwest is including vertical switch features in this docket. Qwest makes vertical switch features available to CLECs on an individual feature basis where technically feasible. While the individual vertical switch features proposed by Qwest do not have a recurring charge, the individual features proposed by Qwest do have nonrecurring charges. Qwest witness Malone testified that these

nonrecurring charges recover the cost of additional work necessary to activate specific vertical switch features.

87. Qwest's witness Million testified that Qwest is submitting new switching-related rates in this proceeding. In the prior proceeding Qwest developed switching rates for local usage, per minute of use ("MOU"), analog and digital line side ports, and separate recurring rates for a variety of features. Qwest now provides those features plus additional features that are included in the analog and digital line side ports at no additional recurring cost as well as nonrecurring rates for many of the features to cover the added cost of provisioning those features in the switch. Those nonrecurring costs are calculated in the ENRC (Study #6413). In addition, Qwest developed a separate rate for a feature known as CLASS Call Trace (Study #6325). Finally, Qwest submits recurring and/or nonrecurring costs for three additional trunk ports including DS1 Local Message Trunk Port (Study #6360), DS1/DID Trunk Port (Study #6419), and DSO Analog Trunk Port (Study #6359).

88. Million explained CLASS Call Trace is not captured in any of Qwest's previously submitted switching costs, including the analog and digital line side port rates. The switching investment determined in the SCM does not reflect the elements presented in the CLASS Call Trace study (Exhibit TKM-2, Study #6325) for two reasons. First, the CLASS Call Trace cost is developed on a "per event" basis to perform traces on calls on an as needed basis; it is not a monthly recurring charge. Second, the majority of costs for this service are based on the labor expenses of the group of people performing the traces, and the cost to store the data needed to complete the trace. These costs are not related to the switching investment used to calculate the costs for ports or MOUs. Thus, the switching cost included in the previous studies does not reflect the costs for this feature.

b. Commission Finding: Switch UNE

90. The Commission accepts the stipulated settlement of switch UNE services and rates and the Commission finds that the services and related fees should be included in the SGAT.

16. Custom Routing

a. Testimony and Background

91. Qwest's Witness Malone testified that customized routing enables a CLEC to direct particular classes of calls to specific outgoing trunks that will permit the CLEC to provide its own interoffice facilities or select among other providers of interoffice facilities, operator services and directory assistance. Customized routing is a software function of a switch. Customized routing may be ordered as an application with Resale, or Unbundled Local Switching and UNE-P combination services.

92. Malone adds that Customized Routing applications are unique to each CLEC. However, Qwest proposes to assess nonrecurring charges based on the following elements: Development of Custom Line Class Code – Directory Assistance or Operator Services Routing Only, per Line Class Code, Line Class Code (LCC) Installation per Switch – Directory Assistance or Operator Services Routing Only and References to the Customized Routing nonrecurring charges are included in Exhibit TKM-1.

93. Qwest's witness Torrence testified that a CLEC would issue a Customized Routing Service Request for Line Class Code to Qwest detailing its routing and facility requirements. Upon receipt of the Customized Routing Service Request for Line Class Code, a jointly established pre-order meeting is scheduled with the requesting CLEC to provide Qwest with the CLECS comprehensive network plan, specific routing requirements and desired due dates.

94. Torrence explained what elements must be in place for a CLEC to request customized routing. First, the requesting CLEC must have purchased unbundled switching from Qwest or be a reseller of Qwest services. Second, the CLEC must have transport facilities and unbundled switch trunk ports on these facilities between Qwest's switch and the desired end location. This combination of unbundled switch trunk ports and transport is commonly referred to as dedicated Interoffice Facilities ("IOF"). While the provisioning of these IOF can be done concurrently with Customized Routing, they must be in place before Customized Routing can be implemented.

95. Torrence testified that in order to implement customized routing a CLEC must have also obtained unbundled switch line ports. Unbundled switch line ports are typically connected to an unbundled loop and provide a CLEC's end user customers access to the basic functionality of a Qwest End Office switch. It allows a CLEC to "purchase" switching functionality without purchasing an actual switch. When all is said

and done, CLEC end users and Qwest end users are served by the same Qwest End Office switch. In other words, unbundled switch line ports allow CLEC end users access to the Public Switch Telephone Network ("PSTN") using the same embedded switch software and routing tables of Qwest's End Office switch that is used for Qwest end users. It is this switch hardware and routing capability that is used to implement Customized Routing.

96. Torrence explained that in order to implement customized routing a CLEC must also obtain unbundled trunk ports. Unbundled switch trunk ports allow CLECs the option of providing their own message trunks, or communication paths, between End Office switches. With the implementation of Customized Routing, this communication path can be established between a Qwest end Office and the requesting CLEC's Directory Assistance (DA) or Operator Services (OS) switches. These Interoffice Facilities provide the path over which a call using Customized Routing travels to its end destination.

97. Torrence explained how a single component, called a Line Class Code ("LCC"), makes up Qwest's Customized Routing product. Line Class Codes are unique to each requesting CLEC and determine, among other things, what an end user customer assigned to that specific code can and cannot dial and how the dialed digits are to be routed and how it will be billed. The rate elements associated with Customized Routing include development of the custom Line Class Codes and the installation of the codes per switch.

b. Commission Finding: Custom Routing

98. The Commission accepts the stipulated settlement of services and rates for customized routing.

17. Miscellaneous Nonrecurring Charges (NRCs)

a. Testimony and Background

99. Qwest's witness Easton testifies on how miscellaneous nonrecurring charges are intended to cover additional engineering, labor, and testing when incurred by Qwest. Miscellaneous charges may be assessed when a CLEC requests work that is not part of the nonrecurring charges normally associated with the product. A CLEC may also be charged a miscellaneous nonrecurring charge when it is a direct result of a CLEC

action, such as when a CLEC reports a trouble condition and, through testing, Qwest isolates the trouble to the portion of the network for which the CLEC is responsible. Qwest proposes the following miscellaneous charges: Cooperative Scheduled Test-LOSS (per month), Coop Scheduled Test-C-Message Noise (per month), Coop Scheduled Test-Balance (per month), Coop Scheduled Test-Gain Slope (per month), Coop Scheduled Test-C Notched Noise (per month), Manual Scheduled Test – Loss (per month), Manual Scheduled Test-C-Message Noise (per month), Manual Scheduled Test-Balance (per month), Manual Scheduled Test-Gain Slope (per month), and Manual Scheduled Test-C Notched Noise (per month).

b. Commission Finding: Miscellaneous Nonrecurring Charges

100. The Commission accepts the stipulated settlement of miscellaneous non-recurring charges.

B. Additional Issues Testimony

101. An October 28, 2002 Notice of Commission Action (NCA) identified two additional issues not addressed in Qwest's D2002.7.87 application or initial testimony. That NCA expands on and identified aspects of each issue on which Qwest must file testimony. The first involves commingled traffic and rate ratcheting.[34] The second issue involves rate benchmarking. In response to the NCA, Qwest filed on November 19, 2002 its additional issues testimony.

1. Commingling of Traffic and Ratcheting of Rates

a. Testimony and Background

102. The Commission's March 6, 2002 Report on Qwest's compliance with the reciprocal compensation checklist item includes the issue "Commingling of InterLATA and Local Traffic on the same Trunk Groups" (pp. 15-23). The Commission's Report disallowed commingled traffic and ratcheted rates pending an opportunity to investigate the issue in Qwest's sequel, this D2002.7.87, cost docket. The Commission expected a thorough investigation of this issue including whether to allow commingling, the relevant costs and rates, the universal service implications, and the issue of commingling on UNEs or on interconnection facilities.

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[34] Qwest overlooked the policy issue of commingling and ratcheting and committed to address the issue in the additional issues portion of this docket. (DR PSC -004)

103. Qwest's witness William Easton testifies on the issues of commingling interLATA and local traffic and price ratcheting. He describes each issue and explains the FCC's and certain other state commission policies. He provides Qwest's policies and recommendations.

104. Easton defines commingling as the mixing of multiple service types either on the same facility, in the same trunk group, or both. He asserts that during the 271 workshops the CLECs that are also IXCs requested approval to use spare capacity on special-access subchannel facilities in high-speed facilities that they secured under tariff for local interconnection trunk groups for UNEs (p. 2).[35] Such commingling maximizes network efficiency and reduces the time to install facilities.

105. Easton testifies that consistent with FCC decisions Qwest disallows commingling of UNEs and special-access services on the same facility[36] (pp. 2, 4). Prior to the Commission's "advice" against it, Qwest allowed the commingling of local interconnection trunk groups on tariffed special access facilities and to the commingling of local interconnection and UNEs. He adds that the FCC ruled that commingling of special access service and UNEs on the same facility is inappropriate, except in some limited circumstances. Apparently, the FCC did not prohibit IXCs from converting special access circuits to combinations of unbundled loops and transport network elements if an IXC used combinations of UNEs to provide a significant amount of local exchange service, in addition to exchange access, to a customer.[37] This FCC policy was later revised to, in part, clarify that the restriction on conversion of special access circuits to facilities subject to TELRIC rates includes "commingling of special access services with such TELRIC-rated facilities. Recently, the FCC reiterated its conclusion: FCC

[35] Special access is private line, a service requiring no switching, but having loop and interoffice segments. (DR PSC-037)

[36] Qwest commingles trunk groups on the same transport system and Qwest allows AT&T and other opt-in CLECs to carry local and non-local traffic on the same trunk group (DR PSC- 036).

[37] The facility over which significant traffic must traverse is the loop transport combination called an enhanced extended loop. (DR PSC -037)

rules "prohibit the 'co-mingling' or combining of unbundled network elements with access services on the same facilities."

106. Easton further argues that commingling is not a significant issue for Montana as few special-access circuits CLECs are leased from Montana's intrastate tariff.[38]

107. Easton expresses Qwest's strong opposition to the reduction of IXC payments, for special access circuits, below their tariffed rates. This is the so-called ratcheting issue. He cites language in a FCC filed tariff that apparently opposes ratcheting.[39] In addition he asserts that the FCC rejects ratcheting (p. 6). He disputes arguments that to not allow ratcheting violates the federal law because TELRIC prices are not then used for local interconnection portion of a special access facility. Easton also mentions the 271 multi-state facilitator's conclusions on this issue. Qwest does not oppose a carrier's use of excess capacity on special access facilities for the transport of local interconnection. Of the states in the 271 multi-state effort all but Montana agreed with the facilitator's report. Among states not party to the multi-state effort, Washington and Arizona require ratcheting and Minnesota has yet to rule on the issue (pp. 7-8 and DR PSC -045).

108. Easton also notes concerns with, apparently, implicit subsidies that are at risk if special access circuits were not priced above cost.[40] While recognizing efficiency gains induced by commingling and ratcheting, Qwest is concerned that access-charge reductions may harm universal-service efforts but admits to no awareness of any FCC or Montana Commission reference to universal service in the pricing of special access

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[38] In October 2002, CLECs purchased only 44 (0.9 percent) of Qwest-provided special-access circuits through the intrastate tariff. Differences in federal and state rates likely owe to distinct pricing methodologies. (DR PSC -038)

[39] That language states that private line transport services and local exchange service may be provided on a shared use facility but the individual recurring and nonrecurring charges shall apply to each – the shared use facility is not apportioned. (p. 5)

[40] Qwest receives about $23.5 million dollars annually almost all of which is from FCC approved prices that are not based on any costing method and are meant, apparently, to provide Qwest implicit subsidies (DR PSC -039). CLECs and IXCs appear to account for the lion's share of these payments (DR PSC -040).

services (pp. 6, 7).[41] Easton acknowledges that estimates are complicated by, and depend upon, the mix of local interconnection and special access on, and the number of, special access facilities and relative use factors on two-way trunks.[42] Because proportional pricing (ratcheting) requires individual rates for each channel on facilities, Qwest estimates that the cost to implement billing systems would require investments and coding work with a cost in excess of $5 million.[43]

109. Easton notes that Qwest's FCC Tariff No. 1, that governs 99 percent of special-access circuits CLECs lease in Montana, rejects ratcheting. The facilitator for the 271 multi-state effort also rejected the concept—at least for now.

110. Easton contends that ratcheting entails several complications, one of which concerns relative usage. According to Easton, "relative usage factors determine the percentage of the local interconnection facility for which each of two interconnected local carriers with two-way trunk groups are responsible" (p. 9). If a CLEC dedicates half of a facility to local traffic but on average uses only 25 percent of total space for such traffic, the CLEC need only pay half the amount in local-traffic charges that would be required if the CLEC used all of the space dedicated for local traffic. Related to this concern, Easton questions how remaining spare capacity (unused for local or special-access traffic) may impact pricing. His final concern pertains to the cost to implement ratcheting. He estimates a cost of over $5 million, partly because special access and local interconnection services are presently billed from one system and UNEs from another.

b. Commission Finding: Commingling of Traffic and Ratcheting of Rates

111. This issue has taken a long and arduous path and still appears unsatisfactorily resolved. As the 271 record was incomplete, the Commission deferred resolution of the issue to a subsequent cost docket. As this issue was not illuminated at the onset of this docket intervention may have been affected. This issue has facets that are not resolved to the Commission's satisfaction.

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[41] The Washington PUC concluded that ratcheting would not "undermine universal service support in the state" (DR PSC-044, and DR PSC -046).

[42] See DR PSC -047.

[43] DR PSC -041.

112. The Commission's findings are as follows. First, the Commission finds that Qwest's agreement to allow limited commingling should be approved.[44] Second, ratcheting of rates, however, will remain unapproved at this time. The Commission is incredulous about a $5 million cost to implement ratcheting given that Qwest is already required to provide for ratcheting in other states. There is no testimony here about whether this is the incremental cost to implement ratcheting in the first or in a subsequent state. A third concern regards competitive neutrality – between Qwest and its affiliates and unaffiliated CLECs. This concern was pursued in the 271 case and is insufficiently resolved here. The Commission intends to further investigate this issue in various subsequent and ongoing proceedings.

2. Benchmarking

a. Testimony and Background

113. The issue of benchmarking emerged in July 2002 when Qwest filed to benchmark certain of its Montana 271 wholesale rates to Qwest's Colorado rates. The initial benchmarked rates were later revised. While the Commission allowed the benchmarked rates to take effect no opportunity arose for interested parties to inquire into how the benchmarked rates were developed and the implications of those benchmarked rates.

114. The October 28, 2002 NCA required Qwest to file additional issue testimony to address the following rate benchmarking issues:

1) Why some rates are benchmarked and others are not benchmarked.
2) Why there are differences in how rates are benchmarked.
3) Evidence that the basis of, and the proposed, benchmarked rates are within a range of reasonableness vis-à-vis the FCC's TELRIC policies (in comments to the FCC Qwest asserted that PSCs distort TELRIC in order to lower TELRIC rates in relation to subsidized retail rates). The FCC looks at whether rates fall within a reasonable range of what TELRIC principles would produce.
4) If the basis of and the resulting benchmarked rates are not within the range of reasonableness vis-à-vis the FCC's TELRIC principles and policies, what measures should be taken to correct unreasonable rates, benchmarked or otherwise.

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[44] That involves a carrier's use of excess capacity on special access facilities for the transport of local interconnection.

5) The relevance and accuracy of another state's (Colorado's) approved rates and the impact of those rates on Montana's benchmarked wholesale rates.
6) The relevance of the FCC's synthesis model (SM) cost estimates to the benchmarking process and ultimate benchmarked wholesale rates in Montana.
7) The financial and regulatory consequences of this Commission's denial or approval of benchmarked rates.

115. In response to the NCA, Qwest filed on November 19, 2002 the testimony of Teresa Million. Million's testimony responds to the Commission's above issues in the NCA. She first explains how benchmarking serves as a shortcut in 271 proceedings. Underlying the benchmark process are opinions by the FCC's and the U.S. Court of Appeal's that comparing rates in one state to those established in a TELRIC-compliant manner in another state, taking into account for the different universal service cost model characteristics of the states, produces rates that are "within a range that could be obtained by using TELRIC" and that the rates are therefore "equivalent to cost-based rates."[45]

116. Million testifies that the UNE rates established October 12, 2001 by the Montana Commission satisfied the FCC's TELRIC requirement. Despite having satisfied the requirement, Qwest unilaterally proposed to benchmark certain of its Montana rates to rates adopted by the Colorado Commission.[46] The purpose of Qwest's proposal was to expedite the FCC consideration of its 271 application and to eliminate issues.

117. Million testifies that although it refers to rates "within a range that could be obtained by using TELRIC" the FCC finds that compliant rates need only be less than or equal to benchmark rates (pp. 2-5). That is, the FCC's 271 review asks if an ILEC's UNE rates are at or below the upper bound of what the FCC and the courts refer to as the

[45]The FCC uses its Universal Service Fund Synthesis Model (SM) or the Hybrid Proxy Model (HCPM) to adjust prices based on differentials between states. If for example the SM loop cost in state "x" is 20% higher than the cost in state "y", the SM-adjusted benchmark loop rate for state "x" based on TELRIC rates adopted by state "y" would be the state "y" rate plus 20 percent. As the FCC's SM determines recurring costs for the UNE-P (loop, port, local switching and transport), and not for associated non-recurring charges, comparisons for the latter are made on a simple rate-to-rate basis. The FCC also concludes also that the SM's absolute costs should not be used to set UNE rates.

[46]Not all rates are benchmarked. For example, intra-building cable is not, perhaps in part because the Colorado studies were not complete (DR PSC -010). Also, for components of loops the method of benchmarking may differ (DR PSC -013).

"range of rates" that a reasonable application of TELRIC produces. The FCC does not examine whether UNE rates are below the lower bound of that range of reasonableness. As Qwest believes such (lower bound) analysis is equally critical, it asked the FCC to re-examine the application of the TELRIC method to apparently ensure that rates are not unfairly or unlawfully low.[47] State Commissions must set rates that are within the range of results from a proper application of TELRIC principles.

118. Million asserts that Qwest followed FCC precedent and that, in turn, Montana's benchmarked rates are within the range of reasonableness – assuming Colorado's rates are TELRIC compliant. That is, a sufficient basis to determine that Montana's benchmarked rates are compliant is a ruling that the Colorado rates do not exceed the TELRIC range. Million adds that Colorado's rates, however, may in fact be lower than what a proper application of TELRIC would produce.

119. The FCC applies benchmarking to recurring rates for basic analog loops, local switching, and shared transport. As the FCC's SM does not determine non-recurring costs, to determine the reasonableness of non-recurring charges associated with recurring and other loop-related elements Qwest compares rates in one state to those in another state, without any cost adjustments.

120. Million details Qwest's benchmarking process for loop rates including two- and four-wire loops and distribution subloops (pp. 9-13). Because the FCC's cost model shows Montana's weighted-average two-wire loop cost to be 49.64 percent greater than Colorado's cost Qwest proposed a Montana rate, of $23.72, that is 49.64 percent higher than its $15.85 rate in Colorado. In turn, because the Commission approved loop rate of $28.37 is higher than the benchmarked rate of $23.72 Qwest lowered the two-wire loop rates by16.39 percent. A similar process was used for four-wire loop costs. Qwest established the distribution subloop rate for Montana at a level 49.64 percent greater than Colorado's subloop rate.[48] Exhibits details Qwest's benchmark rate calculations.

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[47] Qwest asked the FCC to correct the misapplications of TELRIC. Qwest urges the FCC to narrow the gulf created by state application of TELRIC relative to how TELRIC was originally conceived. (DR PSC -056)

[48] As for a distribution subloop's relation to the feeder subloop Qwest provided an explanation (DR PSC -059). The Colorado PUC determined that the TELRIC for the

121. Million also details the method Qwest used to benchmark other rates including switching, port and shared transport.[49] Again, Qwest followed FCC precedent. Because the SM calculates switching costs on a flat dollar per line per month basis Qwest "assumed minutes of use to convert usage based rates to aggregate dollars per line per month." Based on FCC assumptions for usage, the aggregate dollars per line per month for Colorado were compared to the amounts for Montana and the aggregate of switching rates were reduced to equal the cost adjusted amount for Colorado. While Qwest did not modify the Montana port rate, it lowered the local switching rate to bring the aggregate of the switch port and the local switching per minute rates in line with the cost adjusted switch rates for Colorado. Qwest lowered the Montana shared-transport rate to the rate level in Colorado. Qwest reduced non-recurring charges for certain key elements related to unbundled loops and UNE-P to Colorado rate levels.

122. Because no party opposed the benchmarked rates that the Commission allowed to go into effect it appears to Million that the new rates are in the public interest. Qwest does not take the position that the benchmarked UNE rates in Montana are outside of a reasonable TELRIC range and thus, does not intend to seek redress for having too low of UNE rates (See DR PSC -057 and DR PSC -058). If and when the Commission finds that the rates are inappropriate, a new proceeding can be opened.

b. Commission Finding: Benchmarking

123. The Commission finds benchmarking an unusual regulatory process. It is anomalous in how it distributes rights and responsibilities. This process involves the FCC, two state Commissions and Qwest. Designed by the FCC, the process allows it to artfully avoid allocating resources to analyze UNE costs in each state. In lieu of direct

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distribution portion of the loop, (whose costs are higher than the feeder portion), was $11.14. As explained in testimony, this amount represents 70.28% of the total loop rate of $15.85. Therefore, the feeder portion of the loop would be $4.71, or 29.72% of the loop (however, DSO feeder is not offered as a UNE). The two "parts" if desired would be leased for $15.85. If only the distribution is desired, the lease rate is $11.14. If only feeder is desired from the central office to the distribution area, DS1 feeder is usually leased ($79.47).

[49] Qwest explains that the FCC focused on the loop, switch, port and shared transport because CLECs believe these are the most important to their ability to compete. The SM limits what rates can be benchmarked (DR PSC -052).

analysis, the reasonableness of certain wholesale rates in Montana must relate -- be benchmarked -- to another state's (Colorado's) rates. For its part, Qwest appears willing to go along with the process in order to satisfy expectations the FCC has about the level of certain UNE rates. Qwest initially hedged its concession to using the process with the comment that Colorado's rates may be too low; however, Qwest agrees that the benchmarked rates for Montana are not outside a reasonable TELRIC range.

124. The Commission allowed Qwest's benchmarked rates to take effect and will continue to permit the same rates to remain in effect. Revisions to these rates may not be allowed without opportunity for a full contested rate case review. The Commission has no reason to dispute Qwest's admission that the rates are within the range of reasonableness and that they are in the public interest.

III. CONCLUSIONS OF LAW

1. The Commission has authority to supervise, regulate and control public utilities. Section 69-3-102, MCA.

2. Qwest is a public utility offering regulated telecommunications services in the State of Montana. Sections 69-3-101, 803, MCA.

IV. ORDER

THEREFORE, based upon the foregoing, it is ORDERED that:

The Commission findings are adopted as set forth above.

DONE AND DATED this 21st day of January by a vote of 5 to 0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

_____

BOB ROWE, Chairman

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THOMAS J. SCHNEIDER, Vice Chairman

_____

MATT BRAINARD, Commissioner

_____

GREG JERGESON, Commissioner

_____

JAY STOVALL, Commissioner

ATTEST:

Connie Jones
Commission Secretary

(SEAL)

NOTE: You may be entitled to judicial review in this matter. Judicial review may be obtained by filing a petition for review within thirty (30) days of the service of this order. Section 2-4-702, MCA.